

1. A motor vehicle computer system comprising: a central processor with associated memory and an input unit; an output unit and a reader for a bulk storage medium, wherein the navigation or multimedia system also has means for checking authorized use of files on the bulk storage medium.

3. The computer system as claimed in claim 1, further comprising means for decrypting encrypted files.

4. The computer system as claimed in claim 1, further comprising a file management system which is designed to compare an access authorization identifier entered using the input unit with access authorization identifiers for the files stored on the bulk storage medium.

5. The computer system as claimed in claim 4, further comprising means for unscrambling an access authorization identifier entered in scrambled form.

6. The computer system as claimed claim 1, wherein the access authorization identifier an be described as a vector.

7. The computer system as claimed in claim 6, wherein an at least an m-dimensional access authorization identifier is utilized, where m is the number of files stored on the bulk storage medium.

8. The computer system as claimed claim 1, further comprising a device identifier (ID) which is stored in a nonvolatile memory element.

9. The computer system as claimed in claim 8, wherein the device identifier can be changed.

10. The computer system as claimed in claim 1, further comprising means for calculating a key (k) for decrypting an encrypted file from a first code (PIN), entered in scrambled form, and the stored device identifier (ID).

11. The computer system as claimed in claim 10, further comprising means for calculating the access authorization identifier (AC) from a second code (ACW), entered in scrambled form, using the key (k).

12. The computer system as claimed in claim 1, wherein the device identifier (ID) is a vector.

13. The computer system as claimed in claim 1, wherein the device identifier can be automatically changed whenever a new first code has been entered.

14. The computer system as claimed in claim 1, further comprising voice input means.

15. The computer system as claimed in claim 1 further comprising a reader for an optical bulk storage medium.

16. The computer system as claimed in claim 1, wherein the bulk storage medium is a CD-ROM.

17. The computer system as claimed in claim 1, wherein the bulk storage medium is a DVD.

18. The computer system as claimed in claim 1, wherein the files are roadmap data and/or system programs and/or application programs.

19. The computer system as claimed in claim 1, further comprising a connection to a communication means which permits communication with a central station in which the use rights on the files are managed.

20. The computer system as claimed in claim 19, wherein the connection is a short-haul radio link.

21. The computer system as claimed in claim 19, wherein the communication takes place via a mobile radio network.

<sup>22</sup>  
23. The computer system as claimed in claim 1, wherein the system is designed to receive and process traffic information.

<sup>23</sup>  
24. A method for enabling access to a file which is stored on a storage medium comprising the steps of:

- calculating a key (k) with a device identification number (ID) for the computer system and a first scrambled code (PIN);
- generating an identifier (AC) with the key (k) and the second scrambled code (ACW) for the file which is to be enabled; and
- enabling access to the file provided with the calculated identifier for use by the computer system.

<sup>24</sup>  
25. The method as claimed in claim 24, <sup>23</sup> wherein the file is enabled by a file management system of the computer system.

26.<sup>25</sup> The method as claimed in claim 25,<sup>24</sup> wherein the file is encrypted using the key (k) and is decrypted for use by the computer system using the key (k).

27.<sup>26</sup> The method as claimed in claim 25,<sup>24</sup> wherein the device identifier (ID) is changed whenever another file on the storage medium is newly enabled, and the changed identifier is stored in a nonvolatile read-only memory of the computer system.

28.<sup>27</sup> The method as claimed in claim 25,<sup>24</sup> wherein a hierarchical file structure is involved.

29.<sup>28</sup> The method as claimed in claim 25,<sup>24</sup> wherein the access authorization identifier is a vector.

30.<sup>29</sup> The method as claimed in claim 29,<sup>28</sup> wherein the access authorization identifier has binary components.

31.<sup>30</sup> The method as claimed in claim 25,<sup>24</sup> wherein m components  $a(1), a(2), a(3), \dots$  of the vector  $AC(x) = (a(1), a(2), a(3), \dots, a(x-1), a(x), a(x+1), \dots, a(m))$  are used to determine the position of a file  $D(x)$  in the hierarchical file structure such that all the components of the vector  $AC(x)$  which are allocated to files on which the file  $D(x)$  is hierarchically dependent take a first value, while all the remaining components, which are allocated to files on which the file  $D(x)$  is not hierarchically dependent, take a second value.

32.<sup>31</sup> The method as claimed in claim 25,<sup>24</sup> wherein the key (k) is a vector.

33.<sup>32</sup> The method as claimed in claim 25,<sup>24</sup> wherein the device identifier (ID) is a vector.

34. The method as claimed in claim 33, wherein the vector (ID) for the device identifier is changed whenever a file has been enabled, by multiplying it by a change vector  $c$ , so that  $ID(i)=ID(i=1)*c$  is true after a file has been enabled for the  $i$ -th time.

35. The method as claimed in claim 25, wherein the method further comprises generating information in a motor vehicle navigation system.

36. The method as claimed in claim 35, wherein the files contain roadmap data.

37. The method as claimed in claim 25, wherein the files contain application programs.

38. The method as claimed in claim 25, wherein one of the scrambled codes determines a time limit on the use right.

39. A storage medium for a motor vehicle computer system comprising: a storage medium which stores a plurality of files in encrypted form in a hierarchical file structure, said files having an associated identifier, which is a vector, that may be used to limit access.

40. The storage medium as claimed in claim 39, wherein the identifier is an  $m$ -dimensional vector, where  $m$  is the number of files.

41. The storage medium as claimed in claim 39, wherein the vector has binary components.

42. The storage medium as claimed in claim 39, wherein the  $m$  components  $a(1)$ ,  $a(2)$ ,  $a(3)$ , ... of the vector  $AC(x) = (a(1), a(2), a(3), \dots, a(x-1), a(x), a(x+1), \dots, a(m))$  are used to characterize a position of a file  $D(x)$  in the

hierarchical file structure such that all the components of the vector AC(x) which are allocated to files on which the file D(x) is hierarchically dependent take a first value, while all the remaining components, which are allocated to files on which the file D(x) is not hierarchically dependent, take a second value.

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*42* 43. The storage medium as claimed in claim 38, wherein the storage medium is an optical storage medium.

*43* 44. The storage medium as claimed in claim 39, wherein the storage medium is a CD-ROM.

*44* 45. The storage medium as claimed in claim 39, wherein the storage medium is a DVD.

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